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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,198	03/30/2004	Hanching G. Wang	PD-200109A	5150
7590 Victor G. Cooper Gates & Copper LLP Howard Hughes Center 6701 Center Drive West, Suite 1050 Los Angeles, CA 90045			EXAMINER WENDELL, ANDREW	
			ART UNIT 2618	PAPER NUMBER
			MAIL DATE 09/06/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/813,198

Applicant(s)

WANG ET AL.

Examiner

Andrew Wendell

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-32, 35-39, 43 and 44 is/are rejected.
- 7) ☐ Claim(s) 33-34 and 41-42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 27-32, 35-40, and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (US Pat# 6,535,734) in view of Patouraux (US Pat# 6,804,986).

Regarding claim 27, method claim 27 is rejected for the same reason as apparatus claim 35 since the recited elements would perform the claimed steps.

Regarding claim 28, method claim 28 is rejected for the same reason as apparatus claim 36 since the recited elements would perform the claimed steps.

Regarding claim 29, method claim 29 is rejected for the same reason as apparatus claim 37 since the recited elements would perform the claimed steps.

Regarding claim 30, method claim 30 is rejected for the same reason as apparatus claim 38 since the recited elements would perform the claimed steps.

Regarding claim 31, method claim 31 is rejected for the same reason as apparatus claim 39 since the recited elements would perform the claimed steps.

Regarding claim 32, method claim 32 is rejected for the same reason as apparatus claim 40 since the recited elements would perform the claimed steps.

Regarding claim 35, Miller teaches means for computing asymmetry angles (correction for pitch, roll, and yaw angles; Col. 5 lines 27-49 and Col. 6 line 48-Col. 7 line 19); and means for using the asymmetry angles to correct the pointing angle using measurements (Abstract, Col. 3 lines 1-15, Col. 5 lines 27-49, and Col. 6 line 48-Col. 7 line 19). Miller fails to clearly teach a beacon sensor.

Patouraux teaches means for computing asymmetry angles (pitch and roll angles); and beacon sensor measurements (Col. 4 lines 40-61).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a beacon sensor as taught by Patouraux into Miller's correction apparatus in order to provide fast measurements (Col. 1 lines 47-59)

Regarding claim 36, Patouraux teaches means for using the asymmetry angles as beacon bias angles (Col. 4 lines 40-61).

Regarding claim 37, Patouraux teaches means for using the asymmetry angles as time-varying beacon bias angles (Col. 4 lines 40-61).

Regarding claim 38, Miller teaches a terrestrially-based processor (Figs. 1-3).

Regarding claim 39, Patouraux teaches a satellite-based processor (Col. 4 lines 40-61).

Regarding claim 40, Miller teaches means for computing a difference between known azimuth/elevation angles, and their corresponding predicted beam-formed azimuth/elevation angles (Abstract, Col. 3 lines 1-15, Col. 5 lines 27-49, and Col. 6 line 48-Col. 7 line 19).

Regarding claim 43, method claim 43 is rejected for the same reason as apparatus claim 44 since the recited elements would perform the claimed steps.

Regarding claim 44, Patouraux teaches wherein the beacon is a terrestrial beacon (Col. 4 lines 40-61).

***Allowable Subject Matter***

3. Claims 33-34 and 41-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

4. Applicant's arguments with respect to claims 27-44 have been considered but are moot in view of the new ground(s) of rejection.

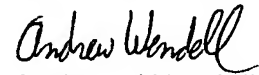
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Wendell whose telephone number is 571-272-0557. The examiner can normally be reached on 7:30-5 M-F.

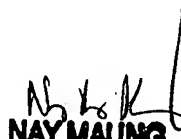
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Andrew Wendell  
Examiner  
Art Unit 2618

8/21/2007

  
**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**